

EH-10992

10/767,478

REMARKS

Applicant thanks the Examiner for the attention accorded the present Application in the July 26, 2007 Non-Final Office Action, in which claims 1-29 and 25-28 were pending. By the foregoing amendments, claims 1, 10, 17 and 25 have been amended to more clearly specify the present invention. No new matter has been added, and the amendments are fully supported throughout the specification, as more fully described below.

Claims 1-29 and 35-38 are now currently pending in this Application. Based on the above amendments, Applicant respectfully submits that the rejections to these claims have been overcome. Reconsideration of this Application, and allowance of claims 1-29 and 35-38, is respectfully requested in view of the foregoing amendments and the following remarks.

35 U.S.C. § 102(b) & § 103(a) rejections

Claims 1-4, 6-10, 14-16 and 25-29 stand rejected under 35 U.S.C. §102(b) as being anticipated by Liburdi. Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liburdi in view of Hasz. Claims 11 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Liburdi in view of Chesnes. Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liburdi in view of Chesnes and further in view of Rafferty '683. Claims 17-20 and 22-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Liburdi in view of Draghi. Claim 21 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liburdi in view of Draghi and further in view of Schaeffer. Claims 35, 36 and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Liburdi in view of Krumpelt. Claim 37 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liburdi in view of Draghi and further in view of Krumpelt. Applicant respectfully disagrees with the Examiner's conclusion and submits that the present invention is not obvious in view of, nor is it even suggested by, any of Liburdi, Hasz, Chesnes, Rafferty '683, Draghi, Schaeffer, and/or Krumpelt.

EH-10992

10/767,478

As presently claimed in Applicant's independent claims 1, 10, 17 and 25, Applicant's invention comprises *methods of restoring dimensions to an article* comprising "providing a *rigid sintered preform* having first and second layers made from different materials, the first and second layers having mechanical properties similar to that of the article, the second layer comprising a low melting point component such that the second layer has a lower melting point than the first layer, the first layer having better oxidation resistance than the second layer, *wherein the rigid sintered preform is formed as a two-layered rigid sintered preform prior to being provided here, and wherein the first layer is disposed closest to the article between the article and the second layer...*". The amendments to these claims are supported by Applicant's original specification at paragraphs [0025], [0026] and [0031] - [0034].

In contrast, none of Liburdi, Hasz, Chesnes, Rafferty '683, Draghi, Schaeffer, and/or Krumpelt disclose, nor even suggest, utilizing a rigid sintered preform that has been formed as a two-layered rigid sintered preform prior to being provided to a section of an article requiring dimensional restoration, like Applicant claims.

Liburdi does not use a rigid sintered preform to do anything. Liburdi discloses using a powder to fill a joint or void, which is then solid state sintered.¹ Thereafter, a thin layer of low melting point braze alloy (either powder, tape or foil) is added to the surface of the partially sintered region, and is then liquid phase sintered.² Furthermore, Liburdi uses a lower melting point alloy as the outside (i.e., second layer) for a repair, not for the first interior layer like Applicant claims.

Hasz discloses using a metal foil to apply a wear coating to a substrate,³ not using a rigid sintered preform to do anything.

Chesnes discloses a powdered composition that can be used to repair superalloy articles via diffusion brazing.⁴ Chesnes never mentions sintering the powder to create a rigid sintered preform like Applicant claims.

¹ See Liburdi, col. 2, lines 51-66; col. 3, line 32 to col. 4, line 34.

² See Liburdi, col. 2, lines 51-66; col. 3, line 32 to col. 4, line 34.

³ See Hasz, col. 2, line 62 to col. 3, line 5; and Abstract, among other places.

⁴ See Chesnes, col. 12, lines 48-54, among other places.

EH-10992

10/767,478

Rafferty '683 discloses using a multiple layered "flexible and pliable" tape to repair parts having complex geometries.⁵ Rafferty '683 never mentions sintering the tape to create a rigid sintered preform like Applicant claims.

Draghi discloses using multiple layers of a flexible tape to reclassify (i.e., dimensionally restore) airfoils,⁶ not using a rigid sintered preform to do anything. Furthermore, Draghi never mentions sintering the tape to create a rigid sintered preform like Applicant claims.

Schaeffer discloses using a flexible tape to repair a damaged chromium coating,⁷ not using a rigid sintered preform to do anything. The tape in Schaeffer is flexible enough so it is in contact with the substrate to which it is applied.⁸ Furthermore, Schaeffer never mentions sintering the tape to create a rigid sintered preform like Applicant claims.

Krumpelt discloses compositionally graded metallic plates, and methods of making same, for use as interconnects for solid oxide fuel cells,⁹ not using a two-layered rigid sintered preform to restore dimensions to anything like Applicant claims.

Therefore, none of Liburdi, Hasz, Chesnes, Rafferty '683, Draghi, Schaeffer, and/or Krumpelt disclose, nor even suggest, neither alone nor in combination, using a **rigid sintered preform**, that has been formed as a two-layered rigid sintered preform prior to being provided to a section of an article requiring dimensional restoration, to restore dimensions to an article or airfoil, as recited in independent claims 1, 10, 17 and 25 of Applicant's invention.

Based on the above arguments and amendments, Applicant respectfully submits that independent claims 1, 10, 17 and 25 of the present invention are patentably distinguished from each of Liburdi, Hasz, Chesnes, Rafferty '683, Draghi, Schaeffer, and Krumpelt. As claims 2-9 and 35 depend from claim 1, claims 11-16 and 36 depend from claim 10, claims 18-24 and 37 depend from claim 17, and claims 26-29 and 38 depend from claim 25, the discussion above applies to these claims as well. Further, these claims

⁵ See Rafferty, col. 2, lines 47-50.

⁶ See Draghi, col. 2, lines 47-57.

⁷ See Schaeffer, col. 6, lines 22-34 and col. 4, lines 24-42, among other places.

⁸ See Schaeffer, col. 6, lines 22-34 and FIGS. 6-7.

⁹ See Krumpelt, col. 1, lines 22-27.

EH-10992

10/767,478

each include separate novel features. Thus, Applicants respectfully request that the Examiner withdraw these rejections and allow pending claims 1-29 and 35-38.

CONCLUSION

Applicant respectfully submits that the amendments and arguments presented above successfully traverse the rejections given by the Examiner in the Office Action. For the above reasons, it is respectfully submitted that the pending claims patentably distinguish the present invention from the cited references. Allowance of pending claims 1-29 and 35-38 is therefore respectfully requested.

As this response is being timely filed within three (3) months of the mailing date of the Non-Final Office Action dated 07/26/07, Applicant believes that there are no fees due. If this is incorrect, the Commissioner is authorized to charge any fees that may be due to **Deposit Account Number 21-0279, Order No. EH-10992.**

Should the Examiner have any questions, or determine that any further action is necessary to place this Application into better form for allowance, the Examiner is encouraged to telephone the undersigned representative at the number listed below.

Respectfully submitted,

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Tracey R. Loughlin
Attorney for Applicants
USPTO Registration No. 51,969

PRATT & WHITNEY
Legal/Intellectual Property
400 Main Street
MS 132-13
East Hartford, CT 06108
Telephone: 860-565-6127
Facsimile: 860-755-1867
E-mail: tracey.loughlin@pw.utc.com